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ABSTRACT

Attribution research has not yet come to a consensus on the conditions under which it can be expected that women will exhibit less self-serving attributions than men for their performance. An experiment was conducted in which subjects (N=66), who were college students, completed tasks requiring performance. They were instructed either that the tasks were part of a hypothetical job interview or that the tasks were measures of satisfaction with college. Some subjects made attributions orally, while others wrote their attributions down. It was found that women made generally less self-serving attributions than did men: they made lower ability attributions and reported less overall confidence in their performance. In addition, it was found that women giving attributions in direct interaction with the experimenter in the mock job interview made much higher luck attributions than subjects making more private attributions and subjects in the nonachievement-oriented conditions. The results suggest that the feminine goal of appearing modest inhibits women in making self-promoting attributions in an achievement situation which involves face-to-face interaction. (ABL)

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The Influence of Context on Gender Differences in Performance Attributions: Further Evidence of a "Feminine Modesty" Effect.

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Running Head: Situational Effects on Gender Differences

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Abstract

Attribution research has not yet come to a consensus on the conditions under which we may expect women to exhibit less self-serving attributions than men for their performance. An experiment was conducted in which subjects completed tasks requiring them to invent new uses for ordinary objects and to suggest solutions for a set of interpersonal problems. They were instructed either that the tasks were part of a hypothetical job interview or that the tasks were measures of satisfaction with college. Some subjects made attributions for their performance on these tasks orally in interaction with the experimenter, while others wrote their attributions down. It was found that women made generally less self-serving attributions than did men: they made lower ability attributions and reported less overall confidence in their performance. In addition, it was found that women giving attributions in direct interaction with the experimenter in the mock job interview made much higher luck attributions than subjects making more private attributions and subjects in the nonachievement-oriented conditions. It is suggested that the feminine social goal of appearing modest inhibits women in making self-promoting attributions in an achievement situation which involves face-to-face interaction.

Situational Effects on Performance Attributions

The idea that women make less self-serving attributions than men under some conditions has become firmly rooted in the social psychological liturature (e.g., Ross and Fletcher, 1985). Several possible explanations have been suggested. Women may make generally more external performance attributions, taking less responsibility for both success and failure (Simon and Feather, 1973; Feather, 1969). Another hypothesis holds that it is expectancy of success at the task which determines individuals' patterns of attributions: expected outcomes suggest attributions to stable causes and unexpected outcomes lead to unstable attributions. Women are conditioned to expect failure, whereas men expect success and so they show different patterns of achievement attributions (Deaux, 1976; Deaux and Emswiller, 1973).

Most research in this area has been based on Weiner et al.'s (1972) fourfold classification of achievement attributions, which holds that the majority of causal explanations for performance rely on attributions of ability, effort, task difficulty, and luck. In turn, these four causes can be arrayed on the two dimensions of stability or instability over time and internality or externality to the actor. According to Weiner and his colleagues, ability is seen as internal and stable, effort as internal and unstable, task difficulty as external and stable, and luck as external and unstable. Other dimensions have since been proposed (e.g., Wimer and Kelley, 1982; Darley and Goethals, 1980), but empirical evidence does suggest that the four basic attributions are important in spontaneous performance attributions (with the possible exception of luck, which is used less frequently). People can readily categorize their attributions on the dimensions of stability and locus of control (Day, 1982; Falbo and Beck, 1979; Frieze, 1976). For these reasons, the system has continued to influence theory and research design.

However, all attributions do not seem to be valued equally by individuals when judging their own and others' performances. Whereas success is usually experienced as positive and failure as negative, the specific emotions produced by a good or bad

performance may depend on the specific dimensions of the attribution which an actor assigns to that performance (Weiner, 1985). One piece of evidence for this is the tendency to display a self-serving bias in reporting attributions for outcomes in achievement situations. People prefer to take personal credit for success by using internal explanations and to distance themselves from failure through external explanations. The strength of this tendency has been verified in several reviews of the achievement attribution literature (Zuckerman, 1979; Bradley, 1978). Bradley concludes that the pattern of internal attributions for success and external attributions for failure is most likely to be elicited when performance is public and ego-involving and when the individual has high choice and a feeling of responsibility for his or her actions. This combination of conditions suggests that the pattern is a self-serving bias, being used to protect subjects' self-esteem. Women, however, have been reported in some studies to be less self-serving, showing relatively higher luck attributions and lower ability attributions in the face of success, and a corresponding willingness to make internal attributions for failure (e.g., Bar-Tal and Frieze, 1976; Simon and Feather, 1973; Feather, 1969).

Yet, in the field of performance attribution itself, consensus on the precise conditions under which such gender effects on the self-serving bias occur has yet to be achieved. Two recent meta-analyses of gender differences in achievement attributions conclude that effects are either minimal (Sohn, 1982) or not consistent enough to provide support for any model of gender differences in performance attributions yet proposed (Frieze, et al., 1982). The Sohn study computed omega-squared for 28 studies and found only one significant statistic, which indicated that men made more attributions to luck for success than did women, a finding contrary to prevailing beliefs about sex differences in attributions. Underscoring the contradiction in their meta-analysis, Frieze, et al. found only that women had some tendency to make higher luck attributions for failure, and men to make stronger attributions to ability. While more consistent with theories addressing sex differences than

were Sohn's findings, both these results were represented by effect sizes within the range considered to be small (Cohen, 1977).

One key to sorting out the contradictions in gender effects on performance attributions might be to examine more closely the context in which attributions are made (Huber and Podsakoff, 1985; McHugh, et al., 1982). For example, as was mentioned above, there is considerable support for the suggestion that unexpected outcomes lead to unstable attributions, while expected outcomes lead to stable or internal attributions. Observed gender effects, then, may be caused by women's lower expectancy of success at masculine sex-typed tasks. Empirically this seems to be true, though it has proved difficult to find a task for which men display comparably low expectancies of success (Rosenfield and Stephan, 1978; Deaux and Farris, 1977). This approach does have the advantage of integrating sex differences into the larger framework of performance attributions as a whole (Deaux, 1976).

A promising, but fairly infrequently studied situational variable which could affect performance attributions is the relative publicity or privacy in which subjects report the causes for their achievements. There are empirical precedents for a self-presentational view of performance attributions in which a "reverse self-serving" pattern of attributions is preferred. For example, several studies have found that teachers (or subjects given the role of teachers) tend to take responsibility for their students' failures and to allow the student a larger share of the credit for successes than would be predicted by a strict self-serving bias interpretation (Ames, 1975; Beckman, 1973). Based on Heider's (1958) proposition that public attributions must be reasonable as well as fulfill the goals of the actor, it has been suggested that under some conditions a more modest set of attributions achieves a more successful self-presentation (Bradley, 1978). In support of this, Tetlock (1980) showed that observers rated teachers more favorably who made moderately low self-serving attributions (i.e., took relatively more responsibility for student failure and less credit for

student success). Thus the reverse self-serving pattern of causal attributions could be interpreted as a self-presentation of "modesty."

Gould and Slone (1982) report that women made more "modest" attributions than men when they failed at a task (i.e., higher attributions to lack of ability than to bad luck), though there were no gender differences in the success condition. The rationale for a modesty interpretation of gender differences comes from the observation that self-serving attributions conflict with the idea that, stereotypically, women should downplay their personal contribution to their successes in order to appear self-effacingly feminine. Gould and Slone point out, though, that taking responsibility for failure is not necessarily a component of modesty. In order to make a strong case for a modesty effect one would need evidence similar to that shown in the teacher studies; namely that women try to distance themselves from success primarily when giving public attributions.

The present study was designed to observe the effects of public versus private context on the attributions of successful subjects. It was felt that manipulating the publicity or privacy of the *attributions* rather than of the *outcome* would provide a more informative test of modesty effects. The question is not simply whether subjects are modestly distancing themselves from success, but whether they are using attributions as a self-presentational tool to help achieve this goal. In Gould and Slone's (1982) study, the public or private nature of subjects' success or failure was manipulated, but all subjects made relatively private written attributions.

One salient feature of many self-presentation situations is the necessity of interacting directly with others. Under such conditions the individual must deal with immediate feedback from his or her partner, and so the need to make socially desirable attributions could be heightened. This might be especially true for women, who, according to stereotypes, should not only be modest but specially attuned to social signals.

This study looks specifically at a situation designed to make subjects feel at least moderately successful. However, the objective standards by which their performances will be evaluated by the experimenter are kept ambiguous throughout the experimental session. Instead, subjects are required to give public or private causal accounts of their performances without having their initial feelings of success objectively verified. Therefore, in order to give effectively self-serving attributions, subjects must first express the opinion that they were successful and then interpret that success in a favorable light through their self-reported attributions.

For the purposes of this study, public attribution was operationalized as delivering attributions aloud in interaction with the experimenter, in an interview format. The relatively private condition was noninteractive and subjects wrote down their attributions. It was felt that this situation overall would be more difficult for women than the traditional attribution paradigm in which success or failure is determined by normative information, since the goal of making self-serving attributions for success would conflict with the goal of appearing modest in a face-to-face social interaction. This situation corresponds to many real-life achievement situations (e.g., job interviews) in which "success" is less concrete than in most laboratory studies, and people, in a sense, negotiate with others for a favorable self-presentation. There are, in fact, many activities which are both socially interactive and achievement-oriented.

In an attempt to highlight the special qualities of such situations, the way in which the achievement tasks are described to subjects is varied. In some cases, they are asked to think of the tasks as part of a job interview, while in others, the tasks are explained as measures of satisfaction with college life. Whereas it is interesting that women's causal attributions may be less self-serving under more social conditions, the phenomenon becomes even more important if it is actually accentuated in situations which strongly emphasize achievement. Some evidence suggests that sex differences in attributions may

be strengthened when the task stresses achievement or competition. Females competing with males seem to make less self-serving attributions (Stephan, et al., 1976). Women also made more global attributions than men for failure in achievement situations, but not in affiliative situations (Berndt, et al., 1982). This seems to indicate that women regard their personal roles in achievement and affiliation somewhat differently. Therefore, the job interview scenario is included in this study to provide a situation which emphasizes achievement, while the college satisfaction conditions examine subjects' responses to the same tasks in a less achievement-oriented atmosphere.

It was predicted that in the noninteractive (written) attribution conditions, all subjects would show relatively self-serving patterns of attributions for their successful performance. Specifically, attributions for ability would be high, and attributions to luck would be low. When women were required to make attributions in social interaction with another person, however, it was anticipated that they would exhibit the reverse, "modest" pattern. This would be particularly true in the interactive job interview situation where social and achievement goals for women would conflict with one another. Men's attributions, on the other hand, should remain more consistent across conditions, since a social agenda would be less pressing for males and conflict less with their achievement goals. Men, then, could be expected to be more self-serving regardless of the conditions under which their self-reported achievement attributions were given.

Method

Subjects

Subjects were 29 male and 37 female undergraduates in an introductory psychology class. They were given course credit for their participation.

Procedure

The study used a 2 x 2 x 2 factorial design. The independent variables were the sex of the subject, mode of communicating attributions (written vs. oral), and description of the tasks (job interview vs. college satisfaction). In order to emphasize the important features of these conditions, the modes of attributions will hereafter be referred to as Interactive and Noninteractive, and the task descriptions will be designated Achievement and Nonachievement.

At the start of the session, participants were given a description of the general "goals" of the study. Subjects in the Achievement conditions were instructed as follows:

"We're interested in how people perform during job interviews. We're trying to develop a set of easy-to-use tasks that could be given during job interviews to help empoloyers get an idea of how potential employees might actually perform on the job. What we'd like you to do is to imagine you are applying for a job as the manager of a small publishing company. The job would include handling incoming orders, organizing shipments, dealing with workers' problems, etc. You'll be given two paper-and-pencil tasks aimed at measuring some of the skills that a person in a managerial position might use."

In contrast, people in the Nonachievement conditions received these instructions:

"We're interested in how people perform in certain types of new problem-solving situations. We're trying to develop a couple of tasks that could be used to predict how well people adjust to a college-type environment. In past studies these tasks have related fairly well to satisfaction with college life. You'll be given two paper-and-pencil tasks aimed at measuring some of the skills that might help a person adjust to a new environment."

The first of the two tasks, the Ordinary Objects Task (OOT), asked subjects to suggest a set of new uses for three ordinary objects, such as a paper cup or a pencil. They were given a fifteen-minute time limit. Pretesting indicated that most subjects found fifteen minutes more than enough time to complete the task to their own satisfaction. After completing this task, subjects read a set of six interpersonal problems and either chose their favorite solution from several which were printed after each scenario or composed their own suggestions. Problems on the Interpersonal Problems Task (IPT) were all work- or job-related, but also dealt with general interpersonal and social issues such as honesty, and so could be applied plausibly to the college satisfaction conditions as well as to the job interview conditions. For example, one scenario dealt with an individual's decision whether or not to work for a political candidate he favored even though he could not stand her campaign manager. The IPT was not timed. Pilot study indicated that both male and female subjects felt moderately successful on these tasks, showed no attributional differences, and found the tasks to be interesting. As subjects finished each task it was put into an envelope by the experimenter and no evaluation or feedback was given on the problem sets during the remainder of the session.

Upon completion of the two tasks, all participants were given a series of questions assessing their subjective feeling of success, attributions for performance and expectancy of success on a similar set of problems. Subjects responded to each question twice: once for the OOT and once for the IPT. Achievement condition subjects were asked to continue to imagine that they were taking part in an interview and the attribution questions were referred to as "interview questions." People in the College conditions were simply requested to continue to respond as best they could.

In the Noninteractive condition, subjects wrote their own responses to these questions. In the Interactive condition, the experimenter/interviewer read an identical set of questions aloud to the subject and checked off his or her responses or wrote them into

blanks beneath the questions (in the case of open-ended items). All three experimenters were female. There were no experimenter effects.

Measures

Attribution questions consisted of (a) an open-ended request for the most important factor determining performance, in the subject's opinion, and (b) a series of four questions assessing the contributions of effort, task difficulty, luck and ability to performance. For example, the effort items stated: "I tried very hard to do well on the Ordinary Objects (Interpersonal Problems) Task." Subjects responded to these items on a Likert-type scale where 1 was "Strongly agree" and 5 was "Strongly disagree." [The open-ended items were included to gather information about subjects' non-directed attributions for the two tasks. It is hoped these will be useful in assessing the applicability of Weiner's attributional classification system to these tasks. Responses to these items are currently being analyzed and will not be discussed in detail here.]

At the last stage of the experimental session, subjects completed a questionnaire which assessed how interesting they found the problem sets and how confident they felt about their responses on both the tasks and the attribution questions. These items also used a five-point Likert-type scale. As a manipulation check, subjects were also requested to indicate what the purpose of the tasks had been; before being debriefed, they were probed concerning any alternative hypotheses about the study.

Results

Manipulation Check

In response to an item requiring subjects to state the purpose of the two tasks they had performed, 86% of those in the Achievement conditions and 84% of those in the Nonachievement conditions correctly reported the instructions they had been given. Unfortunately the item was vulnerable to being misinterpreted as a request for a description of the requirements of the two tasks themselves, rather than the purpose of the experiment. Responses of this type accounted for all the remaining subjects in both task description conditions.

Performance Attributions

A factorial analysis of variance was performed on subjects' responses to the attribution items. Similar tests were made on the performance self-evaluation items.

Ability

As predicted, women made lower ability attributions than did men on both the Ordinary Objects Task, $F(1, 73) = 6.12$, $p < .05$ and the Interpersonal Problems Task, $F(1, 73) = 6.30$, $p \leq .01$. There was no indication that women made more modest (lower) ability attributions in Interactive Conditions. In fact, for the OOT, subjects in general showed a trend toward higher ability attributions in the Interactive than in the Noninteractive conditions, $F(1, 73) = 2.93$, $p < .10$.

Effort

Women reported less effort than men on both the OOT and the IPT when they interacted directly with the experimenter, $F(1, 36) = 5.86$, $p < .005$ and $F(1, 36 = 3.38)$, $p < .05$, respectively, but not in the Noninteractive conditions. In contrast, men themselves indicate less effort in the Noninteractive conditions for the Ordinary Objects Task, $F(1, 35) = 3.85$, $p < .05$, and for the Interpersonal Problems Task, $F(1, 35) = 3.28$, $p < .05$.

Task Difficulty

There were no significant sex differences in reported task difficulty across any of the experimental conditions. For the OOT, subjects said the task was easier in the Interactive conditions than in the Noninteractive conditions, $F(1, 73) = 3.81$, $p \leq .05$. For the IPT, there was no corresponding effect of publicity of attribution, but subjects reported the task easier in the Achievement than in the Nonachievement conditions, $F(1, 73) = 6.21$, $p < .05$. Table 1 shows the overall means on the four attribution items for males and females on each task.

Insert Table 1 about here.

Luck

Only one Sex x Mode of Attribution x Task Description interaction approached significance, $F(1, 73) = 3.00$, $p < .10$. This was for the luck attribution on the Ordinary Objects Task. There was a trend for women to report higher luck attributions than men in the Interactive Achievement condition, $F(1, 19) = 5.43$, $p < .10$. In addition, women made much higher attributions to luck for the Interactive than for the Noninteractive Achievement condition, $F(1, 21) = 18.63$, $p \leq .0001$, and there is a trend for women to make higher luck attributions for the Interactive Achievement condition than for the Interactive Nonachievement condition, $F(1, 19) = 3.53$, $p < .10$. Table 2 shows the breakdown of mean scores for men's and women's luck attributions in this interaction.

In general, subjects made higher luck attributions in the Interactive than in the Noninteractive Achievement condition for the IPT, $F(1, 41) = 6.55$, $p \leq .01$. This pattern was reversed for the Nonachievement conditions, $F(1, 41) = 6.50$, $p \leq .01$.

Insert Table 2 about here

Self-Evaluated Performance

In addition to the attribution questions, subjects responded to items inquiring about their subjective success, their expectancy of future success on similar tasks and their confidence in their performance on each task as well as on the attribution questions. In general, men showed more overall satisfaction with their performances than did women. Males felt more successful than females on the OOT $F(1, 73) = 8.43$, $p < .005$, though there were no sex differences for subjective success on the IPT. However, for both tasks men expected to perform better on hypothetical future trials: $F(1, 73) = 4.04$, $p < .05$ for the IPT and $F(1, 73) = 4.27$, $p < .05$ for the OOT. Similarly, men had more confidence in their performance on both tasks, $F(1, 73) = 3.85$, $p \leq .05$ for the IPT and $F(1, 73) = 9.54$, $p < .005$ for the OOT. Though the difference just missed significance, men also expressed more confidence than women in their responses to the attribution items, $F(1, 73) = 3.79$, $p < .06$.

Effects of mode of attribution and task description also emerged in the performance self-evaluation items. In response to items inquiring how concerned they had been with performing well on the IPT, women reported somewhat less concern than men with their performance in the Interactive/Nonachievement condition, $F(1, 15) = 3.73$, $p < .10$. Men, in turn, were less concerned than women in the Noninteractive/Nonachievement condition, $F(1, 19) = 7.91$, $p \leq .01$. In the Nonachievement conditions, women were less concerned with performance when interacting directly with the experimenter than when making Noninteractive attributions, $F(1, 19) = 6.57$, $p < .05$, while males showed the opposite pattern, $F(1, 15) = 4.55$, $p < .05$. There was also a tendency for men to be more

concerned in the Noninteractive/Nonachievment condition than with the Noninteractive/Achievement condition, $F(1, 18) = 4.16$, $p < .10$. There were no significant effects of sex, mode of attribution, or task description on reported concern with performance for the OOT. However, there was a trend for women to report finding the OOT less interesting than did men, $F(1, 73) = 2.91$, $p < .10$.

Finally, there were several effects of mode of attribution alone. Individuals in the Interactive conditions reported feeling more successful than those in the Noninteractive conditions (OOT only), $F(1, 73) = 4.76$, $p < .05$. However, subjects in the Interactive conditions said they expected to do less well on a hypothetical future OOT, $F(1, 73) = 3.96$, $p < .05$. Responding to the attribution items was reportedly somewhat more difficult in the Interactive than in the Noninteractive conditions, $F(1, 73) = 3.85$, $p < .06$. These items were also said to be more difficult in the Nonachievement than in the Achievement conditions, $F(1, 73) = 4.73$, $p < .05$.

Discussion

Overall, women's attributions for performance on both the OOT and the IPT were less self-serving than were men's. Women claimed less ability than did men across all conditions. They also claimed to be less successful (at least for the OOT), had less confidence in their performance, and had lower expectations about future performances than did men. These findings somewhat support the expectancy hypothesis of sex differences in performance attributions (Deaux, 1976; Feather, 1969). Although there was no measure of expectance before subjects completed the task, it is clear that women were less sure of their success and reported less assurance than men in the stable, internal attribute of ability.

What contribution, then, if any, do situational factors add to the understanding of gender differences in performance attributions? Contrary to the hypothesis, women's ability attributions were not significantly affected by either the interactive or noninteractive circumstances under which they delivered their attributions, or by the relative level of achievement orientation called for by the task description. However, both situational variables seem to have had great impact on women's luck attributions. Women interacting directly with the experimenter when giving their attributions relied much more on luck than did other groups of subjects, and there is some evidence that this tendency was increased under a high achievement orientation. This is particularly striking since, as can be seen by the remaining group means for luck attributions, subjects seemed to feel rather strongly that luck had little to do with their performance. In fact, previous findings (e.g., Falbo and Beck, 1979) indicate that people make less use of luck than of other causal attributions. Here is clear evidence that women are distancing themselves from their success under conditions which emphasize the social nature of an achievement situation. When achievement was less emphasized, as it was in the college satisfaction test situation, women showed luck attributions equivalent to those of other subjects.

Effort attributions were also affected by the publicity under which they were reported. Women indicate relatively less effort when interacting with the experimenter, while men claim to try less hard when their attributions are written. Do effort attributions serve as evidence for or against a modesty effect? Generally, effort attributions for all subjects are fairly high, for which the usual demand characteristics of any laboratory situation may probably serve as an explanation. But, if women are indeed more concerned with presenting a positive, modest image in interaction with the experimenter, their unusually low effort attributions seem not to fit into the pattern. However, Brown and Weiner (1980) found that high effort attributions can also imply that the task is personally important to the subject. If this is true, then looking at effort in combination with other attributions might

provide the key to understanding the gender differences. For men, high effort attributions, combined with high ability attributions and low luck attributions, place the credit for success squarely with the subject, and fit the masculine image of achievement motivation. On the other hand, women's ability attributions are lower across the board, and when we examine these, combined with high luck attributions and low effort attributions, the women in the interactive condition emerge as unconcerned with active striving for achievement. This image fits the feminine stereotype and suggests that women in this condition have chosen to play to the social rather than the competitive demands of the situation.

Some situational effects were not confined to gender differences, but influenced all subjects equally, and these are more difficult to interpret. One reason for the difficulty is that the two tasks showed very different patterns of response. Subjects in the Interactive condition claimed higher ability and said the task was easier on the OOT. This is evidently a self-serving bias, a hypothesis supported by the fact that subjects also reported themselves more successful on the OOT when in the Interactive conditions. However, they expected to be less successful on a future OOT. This finding can also be seen as self-serving. Since there was no objective criterion on which to judge their first performance, subjects may have been "hedging their bets" about a future performance to avoid the embarrassment of being unable to fulfill their prediction of future success (cf. Jones and Berglas, 1978). Such caution would have been increased by the salience of an observer in the Interactive condition.

On the IPT subjects found the task easier in the Achievement (job interview) conditions than in the Nonachievement conditions. This could also be viewed as a self-serving attribution. However, a simpler explanation could be that, since all scenarios were at least somewhat job-related, subjects found it easier and more comfortable to guess what answer would please a prospective employer than to relate the task to adjustment to a college atmosphere as they were instructed in the Nonachievement condition.

Luck attributions on the IPT also differed from the OOT. In the Achievement conditions, luck attributions were higher for the Interactive than for the Noninteractive mode of attribution. Within the Noninteractive mode, though, luck attributions were higher for the Achievement than for the Nonachievement condition. At first glance, these findings seem to indicate a clearly non-self-serving pattern. However, it should be noted that: (a) other attributions for the IPT were self-serving, (high ability and high effort) and (b) although the relative level of luck attributions did vary across conditions, the actual level was consistently low. As Table 1 indicates, subjects reported that luck played a minor role in their performance. The sole exception, and the only time luck attributions crossed the midpoint of the scale, was for women in the Interactive/Achievement condition of the OOT.

A more satisfactory explanation for the pattern of luck attributions for the IPT probably lies in the difference between the two tasks. In response to an open-ended item requesting the most important determinant of their performance, subjects tended to cite personal skills and abilities such as creativity or imagination for the OOT. In contrast, success on the IPT was more often attributed to family upbringing, general experience, and quite often, to the "ready-made" possible solutions provided with the scenarios. It may be, then, that subjects are acknowledging the relatively greater role they believe luck to play in the IPT.

In general, the IPT resulted in fewer differences in attributions than did the OOT. No gender differences were found for task difficulty or luck attributions for this task. Similarly, there was no reported difference between men and women in subjective success. It may be that this task was perceived as more social in nature and therefore conflicted less with women's social and self-presentational goals. The feminine stereotype may allow and even encourage women to be successful at interpersonal tasks. The OOT, in contrast, was perceived to a greater degree as a test of creative ability, and thus could have been seen as more achievement-oriented.

To summarize, women in all conditions of the present study made less self-serving attributions and reported less overall confidence in their present and future performance than did men. This tendency was increased (i.e., women's attributions to luck rose) when women were required to make their self-attributions in interaction with the experimenter where both the task (the OOT) and the situation (a mock job interview) were most explicitly achievement-related. The potential negative consequences of these attributional patterns for women in competition with men are intuitively clear, and the literature on attribution for others provides supporting evidence.

There is some indication that women's performance may be perceived by others as being more due to luck than men's performance (e.g., Terbory and Ilgen, 1975). The present findings suggest that women themselves may contribute to this impression. More importantly, organizational research has shown that performance attributions may affect the way job candidates and employees are actually treated. Both high ability and high effort attributions are rewarded with bonuses and pay raises, but long-term rewards such as promotion are reserved for ability. Furthermore, all types of rewards are considered more appropriate when attributions are for internal causes than when they are for luck or an easy task (Heilman and Guzzo, 1978). Looking specifically at job interviews, Dipboye and Wiley (1978) found that their male interviewers preferred aggressive candidates, and suggested that women's high luck attributions may contribute to a more passive impression. Lower effort attributions, such as women made in the present study for both tasks in the Interactive conditions, might have similar effects.

Further research is needed to verify whether women are experiencing a conflict of modesty and self-aggrandizement in their achievement attributions, and whether their impression management is indeed making an impression. Three areas deserve particular attention: the possible interaction of situational and personality factors in the performance

attributions of men and women, the "gender dynamics" of the interview situation, and the effects of patterns of performance attributions on the observer/interviewer.

It has been suggested that apparent gender effects on performance attributions may in fact be caused by personality variables correlated with gender. The most promising variable to date seems to be need for achievement (Mehrabian, 1968). Levine et al. (1982) found that gender differences in performance attributions disappeared when they controlled for need for achievement. The finding has not been replicated with complete success (e.g., Huber and Podsakoff, 1985), but may deserve further attention. If women are choosing between modest and achieving self-presentations in social performance situations, then level of need for achievement may influence the choice within individuals. That is, those high in need for achievement may find self-serving attributions more important, while those low in the need may prefer to be thought modest.

Another factor of possible importance is the effect of sex of experimenter on subjects' public attributions. In the present study all three experimenters were female, and it might be expected that both male and female subjects would react differently to a male interviewer. It may be that gender differences would be accentuated with male experimenters. For females, the expectations of the feminine stereotype might become more salient, whereas for male subjects, the achievement-orientation of the situation might be increased. The prediction for male subjects is more open to question, however. Fletcher and Spencer (1984) report that males paired with females seem to find the masculine image of assertiveness more salient than they do in an interview with another male.

Finally, if men and women are using performance attributions as a means of self-presentation, what effects, if any, do their attempts have on the observer? It would be interesting to see if the patterns of attributions exhibited by men and women in this experiment are in fact interpreted by observers as self-serving and modest, respectively.

The present study suggests that it is premature to abandon the idea that women's attributions differ in a fundamental way from those of men. However, further exploration of the incidence of "modest" or non-self-serving attributions is necessary. The evidence is that self-serving attributions really do serve us by influencing others' evaluations of our potential as performers (e.g., Heilman and Guzzo, 1978). Thus, for women, feminine stereotyped social behavior is intruding where it is likely to do them more harm than good. It seems an appropriate time to place attribution research back in the context of social interaction, where real-life attributions may be having their most profound effects.

Table 1

Mean Attribution Scores for Males and Females for the OOT and IPT Ordinary Objects Task

Interactive Condition

	Attribution*			
	Effort	Task Difficulty	Ability	Luck
Males	1.4	3.0	2.2	3.9
Females	2.1	2.9	3.0	3.3

Noninteractive Condition

	Effort	Task Difficulty	Ability	Luck
Males	2.0	3.4	2.8	4.0
Females	1.9	3.4	3.2	4.1

Interpersonal Problems Task

Interactive Condition

	Effort	Task Difficulty	Ability	Luck
Males	1.4	2.5	2.3	4.4
Females	2.0	3.0	2.7	4.3

Noninteractive Condition

	Effort	Task Difficulty	Ability	Luck
Males	1.9	2.3	2.0	4.6
Females	1.7	2.7	2.5	4.6

*Larger numbers represent weaker attributions.

Table 2

Mean Luck Attribution Scores (OOT) as a Function of Sex, Mode of Attribution and Task Description*

	Achievement	
	Males	Females
Interactive	3.8	2.8
Noninteractive	4.2	4.6

	Nonachievement	
	Males	Females
Interactive	4.0	3.8
Noninteractive	3.9	3.4

*Larger numbers represent weaker attributions.

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